

RESEARCH COMMUNICATION

Effects of Emotional Support-Focused Nursing Interventions on the Psychosocial Adjustment of Breast Cancer Patients

Aysun Babacan Gümüş¹, Olcay Çam²

Abstract

The purpose was to examine the effect of emotional support-focused nursing interventions on the psychosocial adjustment of breast cancer patients. The research was conducted in the Radiation Oncology Department of Ege University Medical Faculty Hospital and at Tülay Aktas Oncology Hospital in Turkey. There were 30 newly diagnosed breast cancer patients included in the sample. Emotional support-focused nursing interventions were administered in seven sessions individually with each patient. A total of 210 hours of meetings with the patients were conducted. Data were collected by administering a pre-test and post-test in two phases with the patients using a Descriptive Information Form and the Psychosocial Adjustment to Illness Scale - Self Report (PAIS-SR). The patients mean age was 44.5 (SD=6.38) years and the mean duration of illness was 6.46 (SD=1.99) months. In the comparison of the PAIS-SR pretest and post-test mean scores it was determined that there was a significant increase in patients adaptation to health care orientation ($p=0.001$), domestic environment ($p<0.01$), sexual relationships ($p<0.05$), extended family relationships ($p<.001$) and social environment ($p<0.001$), and a significant decrease in psychological distress ($p<0.001$). However there was no change in patients vocational adjustment ($p>.05$). According to these findings emotional support-focused nursing interventions had a part in increasing patients psychosocial adjustment.

Key Words: Breast cancer - emotional support - nursing interventions - psychosocial adaptation

Asian Pacific J Cancer Prev, 9, 691-697

Introduction

Cancer has begun to be considered to be a chronic disease today which includes physical disabilities, psychological, vocational and sexual problems, and which creates short and long term difficulties with adaptation (Patterson et al., 2000; Landmark et al., 2001).

Breast cancer is a major killer of women both globally and regionally (Khatib and Modjtabai, 2006). According to the most recent reports of the Turkish cancer registry, breast cancer is currently the most common female cancer, accounting for 26.6 % of all cancers diagnosed among women (Ministry of Health, 2003). Receiving the diagnosis of cancer is overwhelming for women and can lead to physical problems as well as psychological, social (Ferrell et al., 1997; Rendle, 1997; Schain, 1997; Ferrell et al., 1998; Holmberg et al., 2001), sexual (Hordern, 2000; Avis et al., 2004; Fobair et al., 2006; Pelusi, 2006), spiritual (Gurm, 2008; Taleghani et al., 2006), existential (Landmark et al., 2001; Landmark and Wahl, 2002) and occupational (Maunsell et al., 1999; Wang et al., 1999) problems. From this aspect a biopsychosocial approach is extremely important in the nursing care of breast cancer patients.

Cancer patients feel the need for more psychiatric, emotional and psychosocial support during the process

of coping with their disease. For this reason there has been an increase in interest in cancer patients' psychosocial problems lately. In the literature there have been many different types of psychosocial interventions reported that have been used with cancer patients (Meyer and Mark 1995; Bloch and Kissane, 2000; Baider et al., 2001; Im et al., 2005). In a review of studies about support interventions in breast cancer patients it was determined that many different types of interventions have been used, including emotional support focused (Palsson and Norberg, 1995), supportive, educational (van Wersch et al., 1997; Fobair et al., 2002; Jahraus et al., 2002; Angell et al., 2003; Danhauer et al., 2005; Kayser, 2005), support groups (Helgeson et al. 1999; Collie et al. 2007), cognitive-behavioral therapy (Antoni et al., 2001; Arving et al., 2007), telephone consultation (Hoskins, 2001; Hoskins et al., 2001; Badger et al., 2004; 2007), self-management program (Cimprich et al., 2005) and these interventions have been shown to have a part in decreasing patients' levels of depression and anxiety, increasing their levels of knowledge, coping and adaptation, and improving symptom management.

The goal of psychosocial support in cancer is to provide patients the opportunity to verbalize their feelings and concerns, to increase their ability to cope with treatment stresses, to improve their quality of life, to

¹Çanakkale Onsekiz Mart University, School of Health, 17100 Çanakkale, ²Ege University School of Nursing, Department of Psychiatric Nursing Bornova, 35100, Izmir, Turkey *For correspondence: aysungumus@hotmail.com

decrease their complaints, to help them manage their symptoms, to increase their adaptation to their new condition, and to help them develop new areas of interest, work, expectations and emotional investment (Özkan, 2005). The emotional support given to patients helps them overcome anxiety when they face stressful events, gives them courage, and encourages them to accept them (McCloskey and Bulechek, 2000). When looked at from this aspect psychiatric nurses have various skills and opportunities to provide emotional support to breast cancer patients. Psychiatric nurses can provide emotional support for the purpose of helping these patients find meaning in their lives, decrease their complaints and increase their coping skills.

However there has been an inadequate number of research studies with emotional supportive nursing interventions for breast cancer patients in Turkey and these interventions have not been well defined. It is extremely important for psychiatric nurses to take an active role in the development and implementation of emotionally supportive interventions to help breast cancer patients' psychosocial adaptation and to increase their skills in coping with their disease.

According the purpose of this research was to examine the effect of emotional support-focused nursing interventions developed for breast cancer patients on their psychosocial adaptation.

Materials and Methods

This research was planned as a quasi-experimental study within the scope of emotional support interventions for newly diagnosed breast cancer patients. In the study the quasi-experimental research design, pretest - post-test in one group, was used.

Sample and Setting

This research was conducted in the Radiation Oncology Consultation Department of Ege University Medical Faculty Hospital and in the outpatient chemotherapy unit at Tülay Akta_ Oncology Hospital between September 2005 and July 2007. The research sample was comprised of 30 patients who came to one of these outpatient facilities and met the research inclusion criteria.

Research inclusion criteria

- Agree to participate in the research
 - Be within the first treatment process for breast cancer
 - Be in breast cancer stage 0, I, II (not have metastases)
 - Not have a previous history of any kind of cancer
 - Not have another chronic illness
 - Not have a previously diagnosed major psychiatric disorder and not taking medications for this purpose
 - Be at least a primary school graduate
 - Not have any obstacles to communication
 - Complete the emotional support sessions (a total of 7 sessions were completed individually with every patient)
- Instruments

The research data were collected using a Patients' Descriptive Information Form and the Psychosocial

Adjustment to Illness Scale - Self Report (PAIS-SR).

Patients Descriptive Information Form: This form was used to collect data to determine the patients' sociodemographic characteristics (age, marital status, status of having children, family type, educational level, occupation, perceived income level, social security health insurance status), disease characteristics (disease diagnostic process, status of having surgery, type of surgery, status of ongoing treatment), status of being affected by illness (changes made in life after disease, changes experienced), status of coping with difficulties (level of coping with difficulties, methods of coping with difficulties), expectations of health care personnel, participation in support programs and expectations (participation in any kind of support program, expectations of support program).

Psychosocial Adjustment to Illness Scale - Self Report (PAIS-SR): This multi-dimensional tool was developed by Derogatis and Lopez in 1983 for the purpose of assessing patients' psychosocial adjustment to their illness (Derogatis 1986). The PAIS-SR measures individuals' interactions with other individuals and the institutions in their sociocultural environment. The PAIS-SR has 46 items and asks questions about psychosocial adjustment in seven areas. These seven areas form the PAIS-SR subscales and are:

- Health care orientation
- Vocational environment
- Domestic environment
- Sexual relationships
- Extended family relationships
- Social environment
- Psychological distress (Derogatis 1986; Adaylar 1995).

For each item on the PAIS-SR there are four completing phrases which determine the level of adjustment. The patient can choose a response that best completes the statement for her own experience. The items on the PAIS-SR are scored from 0 to 3 to convert the answers to numerical values. Significantly negative changes from the disease are assessed as 3 points and no changes or positive changes are assessed as 0 points (Derogatis, 1986; Adaylar, 1995). Scores below 35 on the PAIS-SR indicate a "good psychosocial adjustment", scores between 35 and 51 indicate a "fair psychosocial adjustment", and scores over 51 indicate "poor psychosocial adjustment" (Adaylar, 1995).

The translation into Turkish and validity and reliability of the Turkish version of the PAIS-SR was conducted by Adaylar in 1995. The alpha values for the PAIS-SR subscales in their sample of acute and chronically ill patients were, respectively, 0.87, 0.85, 0.80, 0.95, 0.89, 0.93, 0.83 and for the total scale was 0.94 (Adaylar, 1995). In the sample of 30 breast cancer patients in our study the PAIS-SR subscale Cronbach alpha reliability coefficient values were, respectively, 0.60, 0.55, 0.50, 0.86, 0.64, 0.87, 0.85, and for the total scale was found to be 0.84.

Development of emotional support-focused nursing interventions

Emotional support-focused nursing interventions for

breast cancer patients were prepared as supportive interventions that would have a positive role in patients lives. The general purpose of the interventions was to get patients to share their feelings, thoughts and experiences, to facilitate their adjustment to their daily lives, and to improve their ability in coping with their illness. Based on these objectives the literature related to psychosocial problems that patients experience was examined (Landmark et al. 2001; Ferrell et al. 1997; Ferrell et al. 1998a; Holmberg et al. 2001; Hordern 2000, Ferrell et al. 1998b; Rustoen and Begnum 2000; Sammarco 2001) and emotional support-focused nursing interventions directed at these problems were prepared according to information in the two classifications systems, Nursing Interventions Classification (NIC) and Nursing Outcomes Classification (NOC) (McCloskey and Bulechek 2000; Johnson et al. 2000).

In the literature it has been reported that as the length of time that patients have been diagnosed with breast cancer increases their adjustment to emotional changes and coping capacity also increase (Keller, 1998). Accordingly newly diagnosed patients are at higher risk for adjustment to their disease and this was taken into consideration in the selection of the sample. In the review of the literature no information was found about the contents of emotional support-focused nursing interventions for breast cancer patients or the recommended length. For this reason similar studies were used in the determination of the contents and length of the emotional support-focused nursing interventions that were used in this study (Palsson and Norberg 1995; van Wersch et al. 1997; Fobair et al. 2002). In addition because of the cancer patients treatment status and difficult side effects of treatment the need for the interventions to be kept short was kept in mind. Accordingly the psychosocial problem areas that breast cancer patients experience were considered and the contents and length of the emotional support-focused nursing interventions were determined. The decision was made to include the interventions in a specific program with semi-structured, face-to-face, intensive individual interview sessions, once a week for one to one and a half hours for a total of seven sessions. The contents and objective for each session are shown in Table 1.

Interview forms prepared according to each session's contents and objective were prepared before hand for use during the sessions. On the interview forms there were open-ended questions to ascertain the patients' thoughts about the problems they had experienced. The emotional support-focused nursing interventions were administered in the semi-structured interviews within the framework of these questions. The detailed contents of the interviews and emotional support-focused nursing interventions have been published in another article (Çam and Babacan Gümüş, 2006).

Administration of Emotional Support Focused Nursing Interventions

The patients who met the research criteria were invited to participate in the research and those who agreed to participate were taken into the interview room. The interviews were conducted in a quiet and calm room where the patients would feel comfortable during the face-to-face in-depth interviews.

The objective for the first session was to get to know the patient and give her information about the sessions. During the first session all of the patients were given information about the study, the purpose of emotional support-focused nursing interventions, and the subjects that would be discussed during the sessions. They were told that the foundation of the sessions that would be done was to support the patient. They were also told that it was extremely important for them to openly share their feelings and thoughts during the sessions and that they could ask about anything that was bothering them. The patients were informed that the information that was shared during the sessions would be kept confidential, that data collected would not include their name or identity, and that it would only be used for scientific purposes.

In the introductory session, after these explanations were made, the patients were asked whether or not they wanted to continue with the sessions. Those who wanted to continue gave their written consent and then plans were made for the next sessions (Table 1). Every patients' expectations from the sessions and needs were discussed in general. When the patients needs and expectations warranted the priority of subjects considered during the sessions was changed. Accordingly the emotional support-

Table 1. Emotional Support-Focused Nursing Interventions for Breast Cancer Patients

| Session | Contents | Objectives |
|---------|---|---|
| 1st | Introduction | To get to know the patient and to explain the purpose of the interventions. |
| 2nd | Emotional problems | To encourage the patient to verbalize feelings and emotional problems she experienced and to support her adjustment and the development of effective coping methods. |
| 3rd | Domestic problems | To encourage the patient to verbalize problems related to her family life, to improve communication and interactions within the family, to help maintain the family process. |
| 4th | Social and occupational problems | To encourage the patient to verbalize problems she faces in her social, occupational and daily life, to strengthen her social support and relationships and to help her continue her daily and occupational activities. |
| 5th | Body image and sexual life problems | To encourage the patient to talk about problems she has experienced about body image and sexual life, to help her cope with changes that have occurred. |
| 6th | Spiritual problems | To encourage the patient to verbalize the spiritual problems she has, to help her fill voids she has in identity, values and beliefs, and to identify sources of strength she has. |
| 7th | Acceptance of health condition and problems with the future | To help the patient accept her current condition, to find meaning in life for the future, to set goals and make choices. |

focused nursing interventions in later sessions were conducted in a semi-structured, individual interview manner. A total of seven sessions lasting one to one and a half hours once a week were conducted individually with each patient. All sessions were conducted by one researcher with an empathic, interested approach.

Data Collection

Data were collected from the patients in two stages by administering a pretest and post-test. The pretest was administered at the end of the introductory session and the post-test was administered at the end of the seven-week interview process. At the end of the introductory session the patients were asked to complete the Patients' Descriptive Information Form and the PAIS-SR. The PAIS-SR was administered a second time at the end of the seven-week period. The patients completed the forms themselves in an average of 30 minutes in a quiet and comfortable setting.

The data from all patients were collected over a 23-month period of time. A total of 210 hours of interviews were conducted with the 30 patients who completed the pretest and post-test and the seven sessions.

Difficulties Experienced During the Data Collection Process

For various reasons (appointment time not being convenient for patient, patients having some physical problems related to their illness that interfered with the interviews) some patients quit the sessions in the middle of them. The first session was conducted with a total of 91 patients who completed the pre-test. However only 30 of these patients continued with the sessions and completed the post-test. For this reason the number of patients who continued was limited and the data collection took longer than anticipated.

Data Analysis

Data were analyzed in the SPSS program. The paired sample t test was used for comparing the PAIS-SR total and subscale scores obtained before and after the emotional support-focused nursing interventions.

Ethical Considerations

After the research was planned written permission to conduct it was obtained from Ege University School of Nursing Ethics Committee, Ege University Medical Faculty Hospital, and from the patients who agreed to participate.

Results

The mean age of the patients was 44.5 years (SD=6.38), their age range was 30-54 years. The other sociodemographic characteristics of the patients are shown in Table 2.

The mean length of time since diagnosis of breast cancer was 6.46 months (SD=1.99). Of the patients 53.3% had been diagnosed with breast cancer for 4-6 months and 46.7% for 7-9 months. The majority of the patients (73.3%) had undergone a total mastectomy and 26.7% a

Table 2. Sample Characteristics (n=30)

| Demographic Variable | | Frequency (%) |
|----------------------|----------------|---------------|
| Marital status | Married | 30 (100) |
| Have a children | Yes | 26 (86.6) |
| | No | 4 (13.3) |
| Family type | Nuclear | 24 (93.3) |
| | Extended | 2 (6.7) |
| Educational level | Primary school | 10 (33.3) |
| | High school | 9 (30.0) |
| | University | 11 (36.7) |
| Occupation | Housewife | 13 (43.3) |
| | Retired | 2 (6.7) |
| | Civil servant | 11 (36.7) |
| | Self-employed | 4 (13.3) |
| Perceived income | High | 7 (23.3) |
| | Middle | 14 (46.7) |
| | Low | 9 (30.0) |
| Health insurance | Yes | 30 (100) |

partial mastectomy. The ongoing treatment for 40% of the patients was chemotherapy and for 60% was radiation therapy.

All (100%) of the patients stated that their lives had changed since having the disease. These changes included: sadness, fear, uncertainty, helplessness, uneasiness (100%), inability to carry out domestic roles and responsibilities (76.6%), disruption of social life (40%), disruption in occupational life (36.6%), financial problems or difficulties (26.6%), change in priorities in life (20.0%), and loneliness (16.6%).

In this study 63.3% of the patients stated that they could cope with the difficulties they experienced somewhat and 36.7% stated that they could not cope at all. The methods that the patients used to cope with their difficulties were, respectively, sharing their problems with family members (46.6%), hoping to get well (30.0%), sharing their problems with friends (23.3%), researching new treatment methods (16.6%), choosing to stay alone (16.6%), crying (13.3%), and performing religious rituals (13.3%).

Patients' expectations of health care personnel were: administer a good treatment (100%), act interested and be understanding (100%), speed up treatment-related procedures (76.6%), give information about the side effects of treatment (63.3%), decrease the waiting time for treatment (46.6%), and be accessible when they are needed (23.3%).

None of the patients had previously participated in any kind of support program, such as, support groups or a counseling program. The patients expectations from the support program was to decrease problems created by the disease (50.0%), to inform them about the treatment of the disease (33.3%), and to be able to share about problems created by the disease (16.6%).

The differences between the patients PAIS-SR pretest and post-test mean scores are shown in Table 3. Statistically significant differences were determined for the patients' health care orientation ($p<.01$), domestic environment ($p<.01$), sexual relationships ($p<.05$), extended family relationships ($p<.01$), social environment ($p<.01$), psychological distress ($p<.01$) and PAIS-SR (total) ($p<.01$) score means. However a statistically

Table 3. Patients PAIS-SR Pretest and Post-Test Mean Scores

| PAIS-SR subscales | Pretest | Post-test | t value | p value |
|-------------------------------|-------------|-------------|---------|---------|
| Health care orientation | 11.1 (2.77) | 10.4 (2.59) | 7.616 | 0.000 |
| Vocational environment | 12.9 (2.23) | 12.8 (2.16) | 0.441 | 0.662 |
| Domestic environment | 11.5 (3.32) | 9.4 (3.00) | 9.709 | 0.000 |
| Sexual relationships | 11.4 (3.74) | 11.1 (4.06) | 2.567 | 0.016 |
| Extended family relationships | 4.6 (2.48) | 3.3 (2.13) | 7.102 | 0.000 |
| Social environment | 13.7 (3.61) | 12.7 (3.47) | 7.883 | 0.000 |
| Psychological distress | 11.8 (4.47) | 10.1 (4.50) | 6.934 | 0.000 |
| PAIS-SR (total) | 77.1 (12.6) | 69.9 (12.2) | 11.77 | 0.000 |

Table 4. Patients Pretest and Post-Test Psychosocial Adjustment Status

| Psychosocial Adjustment Status | Pretest | Post-test |
|---------------------------------------|----------|-----------|
| Good psychosocial adjustment (0-34) | - | - |
| Fair psychosocial adjustment (35-51) | - | 6 (20.0) |
| Poor psychosocial adjustment (52-138) | 30 (100) | 24 (80.0) |

Table 5. Patients Feedback about Emotional Support-focused Nursing Interventions

| | | |
|---|----|------|
| I think it would be very beneficial for patients to be able to get this type of service. | 19 | 63.3 |
| I liked the sessions. | 18 | 60.0 |
| I felt comfortable during the sessions. | 16 | 53.3 |
| I think there should be more of this type of service. | 14 | 46.6 |
| The sessions helped me fight with my disease. | 12 | 40.0 |
| During the sessions my helplessness and loneliness decreased. | 12 | 40.0 |
| It the beginning I was anxious about the sessions but after I thought I wonder if they'll be useful I began to feel better. | 6 | 20.0 |
| The sessions helped me understand myself better. | 5 | 16.6 |
| Before the sessions I had very confused feelings but now I feel better. | 5 | 16.6 |
| I really appreciate the nurses providing this type of service. | 4 | 13.3 |

Data are N and %. Some patients gave more than one answer

significant difference in the pre and post-test mean scores for vocational environment was not found ($p > .05$).

All of the patients psychological adjustment was at a poor level before the emotional support-focused nursing interventions. After the nursing interventions 20% of the patients' level of psychosocial adjustment was at a fair level and 80% at a poor level (Table 4). The feedback the patients gave about the emotional support-focused nursing interventions after the sessions are shown in Table 5.

Discussion

The majority of the patients participating in the research were middle-aged, married, living with their husband and children, had a high level of education, an average income level, and had social security health insurance (Table 2). The finding that all of the patients were married and the majority were living with their husbands and children can be considered to be an indicator of positive family support. In addition the finding that all

of the patients had social security health insurance indicates that they had an important resource to help them cope with financial problems.

All of the patients in the sample were newly diagnosed and all had undergone a surgical procedure because of their breast cancer. The majority of the patients had had a total mastectomy and were receiving radiation therapy. After being diagnosed with breast cancer they had experienced emotional, social, domestic, occupational and economic changes in their lives. These findings are consistent with information in the literature about problems breast cancer patients experience (; Avis et al. 2004; Ferrell et al. 1997; Ferrell et al. 1998a, Ferrell et al. 1998b; Holmberg et al. 2001; Maunsel et al. 1999; Pelusi 2006; Rendle 1997; Schain 1997; Wang et al. 1999).

In the examination of the coping methods used by breast cancer patients in this study it was determined that they primarily used emotion-focused approaches and the patients used both adaptive and maladaptive methods. This finding is consistent with the literature (Akechi et al. 2001; Livneh 2000). Individuals use effective coping methods to maintain their biopsychosocial adaptation to the environment and their integrity (Adaylar, 1995). Akechi et al (2001) concluded that there is a relationships between good psychosocial adjustment to an illness and the use of problem directed effective coping methods. In this study it was determined that breast cancer patients using weak coping responses (weak fighting spirit, excessive worry, high level of fatalism) was a significant indicator of psychiatric morbidity in the patients (Akechi et al., 2001). When the research findings were examined from this aspect the results that the participating patients primarily using emotion-focused methods and had a poor level of psychosocial adjustment support each other.

The participating patient expectations of health care personnel were, in general, problems related to treatment procedures and hospital procedures which is a result of there being inadequate communication between patients and health care personnel. These findings indicate that patients' expectations were not fully met. These findings are also consistent with the results of other research studies (Palsson and Norberg, 1995; Landmark and Wahl, 2002; Figueiredo et al., 2004). In another study similar results were obtained and it was determined that before emotional support patients were more bothered by long periods of waiting at the hospital, inadequate communication between the patient and health professionals, and felt their knowledge was inadequate (Palsson and Norberg, 1995). In another study women stated that they were not able to get enough support from health care personnel, particularly during ongoing treatment, that they were bothered by the length of time they waited for treatments, and that they had difficulty asking for information they needed (Landmark and Wahl, 2002). Similarly in another study it was reported that patients trusted their family and friends more than health care personnel and shared their problems more with them (Figueiredo et al., 2004).

In Turkey within the scope of consultation liaison psychiatric practices in health care facilities various support interventions are provided, such as support groups, individual or group counseling that are directed at patients'

psychosocial needs. However these practices are not at an adequate level and the majority are not routine practices in health care facilities. Also there is an inadequate number of trained nursing specialists for the high number of patients. This result can be considered to be expected from patients who had not participated in any kind of support program. In addition cancer patients and their families in other countries who have formed their own support or assistance groups have been reported to function as an important source of emotional and social support (Palsson and Norberg, 1995). These types of support are very limited in Turkey, however.

In the comparison of the patients PAIS-SR pretest and post-test mean scores it was determined that there were significant increases in patients' health care orientation, domestic environment, sexual relationships, extended family relationships, and social environment, and a significant decrease in psychological distress, however no significant difference was found in the pre and post-test mean scores for vocational environment (Table 3). Accordingly the nursing interventions administered in this study had a positive influence on improving psychosocial adjustment. The reason why there was no improvement in the patients vocational environment was likely a result of the patients intensive therapy and that they had not yet returned to work.

On the PAIS-SR a score of 51 and above indicates poor psychosocial adjustment (Derogatis 1986; Adaylar, 1995). According to this cut-off point all patients were determined to have poor psychosocial adjustment on the pretest (Table 4). The participating patients statements that they had psychosocial problems and the fact that they continued the individual sessions because of this supports this finding. In addition this finding is consistent with information in the literature that patients in the early diagnostic stage experience more intense problems (Keller 1998). On the post-test 20% of the patients had improved from a poor level to a fair level of psychosocial adjustment (Table 4). According to this finding the administered emotional support-focused nursing interventions improved the level of psychosocial adjustment of 20% of the patients.

In the patients feedback about the emotional support-focused nursing interventions after the sessions the patients stated that they were able to verbalize their thoughts and feelings, they were helped in coping with their negative feelings, and they were able to understand and be understood better. In addition the patients had positive feedback about the need for these types of interventions and stated that it is extremely important that they be included in routine services.

Conclusion and Recommendations

In this study the effect of emotional support-focused nursing interventions for breast cancer patients on their psychosocial adjustment was examined. As a result of the study it was determined that there were significant increases in patients health care orientation, domestic environment, sexual relationships, extended family relationships, and social environment, and a significant decrease in psychological distress, however no significant

difference occurred in vocational environment. According to this result the nursing interventions administered had a positive effect on improving patients' psychosocial adjustment.

Based on the results obtained in this study the following recommendations are made:

Because personal experiences vary during the illness process every patient needs to be evaluated individually for psychosocial support needs and data obtained from individual conversations with patients needs to be used in emotional support programs.

Emotional support-focused nursing interventions for breast cancer patients need to be included within the routine practice as individual or group programs.

To be able to more clearly analyze the effect of emotional support-focused nursing interventions future studies need to include larger samples, use a randomized design, in specific groups with different characteristics and have a longer period of follow-up.

Research Limitations

This research was conducted with newly diagnosed patients in the early stages of breast cancer. Because the sample did not include individuals with other stages of breast cancer (those having received treatment for a long time, those in advanced stages, or those with metastases) the findings from this research can only be generalized to individuals with the characteristics of the patients in the sample.

A pretest-post-test design was used in this research and according to this design there is no control group. For this reason in the analysis of the effect of the interventions that were administered there is a possibility that this design may be inadequate. The factors that were not controlled may have affected the results as well and this is another limitation of the research.

References

- Adaylar M. (1995). Kronik hastalı₁ olan bireylerin hastalığıdaki tutum, adaptasyon, algı ve öz-bakım yönelimleri (Attitudes, adaptation, perceptions about their illness and self-care intentions of chronically ill patients). Istanbul: Istanbul Üniversitesi
- Akechi T, Okuyama T, Imoto S, et al. (2001) Biomedical and psychosocial determinants of psychiatric morbidity among postoperative ambulatory breast cancer patients. *Breast Cancer Res Treat*, **65**, 195-202.
- Angell KL, Kreshka MA, McCoy R, et al (2003). Psychosocial intervention for rural women with breast cancer. *J Gen Intern Med*, **18**, 499-507.
- Antoni MH, Lehman JM, Kilbourn KM, et al (2001). Cognitive-behavioral stress management intervention decreases the prevalence of depression and enhances benefit finding among women under treatment for early-stage breast cancer. *Health Psychol*, **20**, 20-32.
- Arving C, Sjöden PO, Bergh J, et al (2007). Individual psychosocial support for breast cancer patients. *Cancer Nursing*, **30**, 10-9.
- AVIS NE, Crawford S, Manuel J (2004). Psychosocial problems among younger women with breast cancer. *Psycho-Oncol*, **13**, 295-308.

- Badger T, Sergin C, Meek P et al (2004). A case study of telephone interpersonal counseling for women with breast cancer and their partners. *Oncol Nursing Forum*, **31**, 997-1003.
- Badger T, Segrin C, Dorros SM, et al (2007). Depression and anxiety in women with breast cancer and their partners. *Nurs Res*, **56**, 44-53.
- Baider L, Peretz T, Hadani PE, Koch U (2001). Psychological intervention in cancer patients: a randomised study. *Gen Hosp Psychiatry*, **23**, 272-277.
- Bloch S, Kissane D (2000). Psychotherapies in psycho-oncology. *Br J Psychiatry*, **177**, 112-116.
- Cimprich B, Janz NK, Nourthouse L (2005). Taking charge: a self-management program for women following breast cancer treatment. *Psycho-Oncol*, **14**, 704-717.
- Collie K, Kreshka MA, Ferrier S (2007). Videoconferencing for delivery of breast cancer support groups to women living in rural communities: a pilot study. *Psycho-Oncol*, **16**, 778-782.
- Çam O, Babacan Gümü_ A. (2006). Meme kanserli kadınlar için emosyonel destek odaklı hem_irelik giri_imleri (Emotional support-focused nursing interventions for breast cancer patients). *Cumhuriyet Üniversitesi Hem_irelik Yüksekokulu Dergisi*, **10**, 52-60.
- Danhauer SC, Hurt GJ, Gentry S, et al (2005). Health and wellness after breast cancer diagnosis: a collaborative pilot program for younger women. *Psycho-Oncol*, **14**, S1-S104, 39.
- Derogatis LR (1986). The psychosocial adjustment to illness scale (PAIS). *J Psychosomatic Res*, **30**, 77-91.
- Ferrell BR, Grant M, Funk B, et al (1997). Quality of life in breast cancer: Part I. physical and social well-being. *Cancer Nursing*, **20**, 398-408.
- Ferrell BR, Grant M, Funk B, et al (1998a). Quality of life in breast cancer: Part II. psychological and spiritual well-being. *Cancer Nursing*, **21**, 1-9.
- Ferrell BR, Grant M, Funk B, Otis-Green S, Garcia N. (1998b). Quality of life in breast cancer survivors: implications for developing support services. *Oncol Nursing Forum*, **25**, 887-95.
- Figueiredo MI, Fries E, Ingram KM (2004). The role of disclosure patterns and unsupportive social interactions in the well-being of breast cancer patients. *Psycho-Oncol*, **13**, 96-105.
- Fobair P, Kopman C, Dimiceli S, et al (2002). Psychosocial intervention for lesbians with primary breast cancer. *Psycho-Oncol*, **11**, 427-38.
- Fobair P, Stewart SL, Chang S et al (2006). Body image and sexual problems in young women with breast cancer. *Psycho-Oncol*, **15**, 79-594.
- Gurm BK, Stephen J, MacKenzie G, et al (2008). Understanding Canadian Punjabi-speaking South Asian women's experience of breast cancer: a qualitative study. *Int J Nursing Stud*, **45**, 266-76.
- Helgeson VS, Cohen S, Schultz R, Yasko J (1999). Education and peer discussion group interventions and adjustment to breast cancer. *Arch Gen Psychiatry*, **56**, 340-7.
- Hoskins CN (2001). Promoting adjustment among women with breast cancer and their partners: a program of research. *J New York State Nurse Assoc*, **32**, 19-23.
- Hoskins CN, Haber J, Budin WC, et al (2001). Breast cancer: education, counseling, and adjustment - a pilot study. *Psychol Reports*, **89**, 677-704.
- Holmberg SK, Scott LL, Alexy W, Fife BL (2001). Relations issues of women with breast cancer. *Cancer Nursing*, **24**, 53-60.
- Hordern A (2000). Intimacy an sexuality for the women with breast cancer. *Cancer Nursing*, **23**, 230-6.
- Im E-K, Chee W, Tsai H-M (2005). Internet cancer support groups. *Cancer Nursing*, **28**, 1-7.
- Jahraus D, Sokolosky S, Thurston N, Guo D (2002). Evaluation of an education program for patients with breast cancer receiving radiation therapy. *Cancer Nursing*, **25**, 266-75.
- Johnson M, Maas M, Moorhead S (eds.) (2000). *Nursing Outcomes Classification (NOC), Second Edition*, Mosby, .
- Kayser K (2005). An evaluation of a couples-based intervention on the psychosocial adjustment to breast cancer. *Apos 2nd Annual Conference Abstracts. Psycho-Oncol*, **14**, S1-S104: 15.
- Khatib OMN, Modjtabei A (2006). Guidelines for the Early Detection and Screening of Breast Cancer. World Health Organization. Technical Publications Series, No.30..
- Keller M (1998). Psychosocial care of breast cancer patients. *Anticancer Res*, **18**, 2257-9.
- Landmark BT, Strandmark M, Wahl AK (2001). Living with diagnosed breast cancer - the meaning of existential issues. *Cancer Nursing*, **24**, 220-6.
- Landmark BT, Wahl A (2002). Living with newly diagnosed breast cancer: a qualitative study of 10 women with newly diagnosed breast cancer, *J Adv Nursing*, **40**, 112-21.
- Livneh H (2000). Psychosocial adaptation to cancer: the role of coping strategies. *J Rehabilitation*, **66**, 40-9.
- Maunsell E, Brisson C, DuBois L, et al (1999). Work problems after breast cancer: an exploratory qualitative study. *Psycho-Oncology*, **8**, 467-73.
- McCloskey JC, Bulechek GM (2000). *Nursing Interventions Classification (NIC), Third Edition*, Mosby.
- Meyer TJ, Mark MM (1995). Effects of psychosocial interventions with adult cancer patients: a meta-analysis of randomized experiments. *Health Psychol*, **14**, 101-8.
- Ministry of Health, Turkey. The most frequent ten cancers in females in Turkey 2003. Available at: http://212.175.169.156/KSDB/BelgeGoster.aspx?F6E10F8892433CF_FAC8287D72AD903BE00EA04F0B1B62666 (Accessed December 25, 2007)
- Özkan S (2005). Meme kanserli hastaya psikolojik yakla_ım (Psychological approach to breast cancer patients). VIII. Ulusal Meme Hastalıkları Kongresi, Kongre Özet Kitabı, İstanbul, 21-24 Eylül .
- Palsson M-BE, Norberg A (1995). Breast cancer experiences of nursing care with the focus on emotional support: the implication of a nursing intervention. *J Adv Nursing*, **1??**, 277-85.
- Patterson P, Moylan E, Bannon S, Salih F (2000). Needs analysis of cancer education program in South Western Sydney. *Cancer Nursing*, **23**, 186-92
- Pelusi J (2006). Sexuality and body image. *AJN*. ;106(3):32-38.
- Rendle K (1997). Survivorship and breast cancer: the psychosocial issues. *J Clin Nurs*, **6**, 403-10.
- Rustoen T, Begnum S (2000). Quality of life in women with breast cancer. *Cancer Nursing*, **23**, 416-21.
- Schain W (1997). Psychosocial issues and life cycle concerns of women with breast cancer. *Cancer Prev Control*, **1**, 122-32.
- Taleghani F, Parsa Yekta Z, Nasrabadi AN (2006). Coping with breast cancer in newly diagnosed Iranian women. *J Adv Nursing*, **54**, 265-73.
- van Wersch AV, Bonnema J, Prinsen B, et al (1997). Continuity of information for breast cancer patients: the development, use and evaluation of a multidisciplinary care-protocol. *Patient Educ Counsel*, **30**, 175-86.
- Wang X, Cosby LG, Harris MG, Liu T (1999). Major concerns and needs of breast cancer patients. *Cancer Nursing*, **22**, 157-163.